

## ABSTRACT

Computer systems and methods of operating a computer system are described. The computer system can include a computer rack; a first stack and a second stack provided in the computer rack, each stack comprising one or more computers; a first cooling plenum configured such that cooling air can flow between the computers in the first stack and the first cooling plenum; and a second cooling plenum configured such that cooling air can flow between the computers in the second stack and the second cooling plenum. The method of operating a plurality of computers may include providing a first and a second computer in a partial back-to-back relationship in the computer rack such that an overlapping portion of the back of the first computer faces an overlapping portion of the back of the second computer; passing cooling air through the first computer and out of an exposed portion of the back of the first computer and into a first cooling plenum or passing cooling air from the first cooling plenum into the first computer; and passing cooling air through the second computer and out of an exposed portion of the back of the second computer and into a second cooling plenum or passing cooling air from the second cooling plenum into the second computer.